UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,213	09/22/2006	Magnus Normark	502.1258USN	5909

33369   7590   10/16/2009
FASTH LAW OFFICES (ROLF FASTH)
26 PINECREST PLAZA, SUITE 2
SOUTHERN PINES, NC 28387-4301

EXAMINER
BENGZON, GREG C

ART UNIT	PAPER NUMBER
2444	

NOTIFICATION DATE	DELIVERY MODE
10/16/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sloan.smith@fasthlaw.com
nan_russell@fasthlaw.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 June 2009*.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-17* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

OFFICE ACTION

This application has been examined. Claims 1-17 are pending.

Making Final

Applicant's arguments filed 06/25/2009 have been fully considered but they are moot in view of the new grounds for rejection.

The claim amendments regarding -- '*interface being distinct and separate from the device with second protocol objects to be managed, the second protocol* -- and -- '*the first management application requesting the interface to read or update the corresponding first protocol objects* ' -- and -- ' *the interface mapping the corresponding first protocol objects onto the second protocol objects to be managed in an interface database to translate the corresponding first protocol_objects into the second protocol understood by the second management application* ' -- alter the scope of the claims but do not overcome the disclosure by the prior art as shown below.

The Examiner presents new grounds for rejection as necessitated by the claim amendments and is thus making this action FINAL.

Response to Arguments

Applicant's arguments filed 06/25/2009 have been fully considered but they are moot in view of the new grounds for rejection.

The Examiner interprets the claimed method and system as directed towards statutory subject matter as embodied by the server for hosting the interface (Applicant

Specifications Page 10 Lines 30,Page 11 Lines 15-20) and transmitting translated

signals to the client device to perform the data management operations on the device.

The Examiner interprets the said method as inherently requiring a computer device to

implement the interface, various applications, transmit signals and perform the data

management operations on the client device described as physical equipment in

Applicant Specification Page 9 Lines 5-10. Furthermore the Examiner does not detect

any indication in the Applicant Specifications indicating the server as a purely software

component and hence interprets said server as comprising a hardware component.

The Applicant presents the following argument(s) [*in italics*]:

...Mariana also fails to teach or suggest the steps of the first management

application identifying which first protocol objects correspond to the second protocol

object to be management and requesting the interface to update the corresponding first

protocol objects...

... Mariana's interface is not distinct and separate from his smart card. ...The

cited references are void any discussion of an interface that is distinct and separate

from the device (smart card) with second protocol objects to be managed...

The Examiner respectfully disagrees with the Applicant.

Arbo disclosed a universal data mapper for enabling SnycML commands to be

interpreted according to the special translation requirements of each individual mobile

device. The universal data mapper accepts the messages exchanges between the

client devices and the web servers and is separate and distinct from said client and web

servers. While Arbo disclosed embodiments wherein the second protocol is related to

PIM data Arbo Paragraph 79 explicitly disclosed wherein the said universal data

mapper is applicable to any type of data/protocol.

Arbo Paragraph 55 disclosed wherein the SyncML server is operable to call the

universal mapping program methods MapToUC and MapTovCard upon receipt of a

vCard or a request for an update of the dPIM data of a client device 104 received from

the web server 120 and the sync engine 122, and to thereby initiate mapping of PIM

data between the server iPIM storage object 114 and a vCard. The SyncML server 124

is also operable to handle protocol conversion and/or related tasks associated with the

communication of vCards via the SyncML protocol.

Arbo disclosed (re. Claim 1) said *interface being distinct and separate from the*

device with second protocol objects to be managed' (Arbo-Figure 1, *universal data*

mapper item 126,Paragraph 55) -- and -- *'the first management application*

requesting the interface to read or update the corresponding first protocol objects '

(Arbo-Paragraph 11 , *Once mapping is completed, the universal mapping program*

transforms the mapped data into a form suitable for storage in the server computer

system's database or for communication, as a vCard, to the client device') -- and -- *'*

the interface mapping the corresponding first protocol objects onto the second protocol

objects to be managed in an interface database to translate the corresponding first

protocol objects into the second protocol understood by the second management

application. (Arbo-Paragraph 11 , '*Once mapping is completed, the universal mapping*

program transforms the mapped data into a form suitable for storage in the server

computer system's database or for communication, as a vCard, to the client device')

The Applicant presents the following argument(s) [*in italics*]:

A rationale for combining Mariana, Chakravorty, DM and Kuo can be found on

page 10 where it is stated that the combination is obvious because it would enable

automatically and selectively translate each file, URL, or file reference as they should be

when the contents of the smart card are read." Again, this merely states a benefit

without the required explicit and articulated reasoning with rational underpinning...

The Examiner respectfully disagrees with the Applicant.

Mariana Column 4 Lines 40-55 clearly indicates a need for communication

interfaces between smart card applications and remote servers on the Internet in order

to perform device management operations such as (Mariana-Column 6 Lines 60-65)

downloading, updating and/or deleting applications or parts of applications stored in the

smart card (files, programs, scripts, etc.) via the internet network. SyncML DM protocol

facilitates device management operations by indicating the URL of the target data set

but does not take into account smart card files.

Chakravorty disclosed implementing the SIM toolkit for reading descriptor files

which are on the smart card. Thus Chakravorty implicitly disclosed a file management

system on the smartcard.

Kuo disclosed assigning and storing a URL on the smart card wherein said URL

represents a smartcard file.

The Examiner notes that it would have been obvious to a person such as

Mariana who desires to bridge the gap between the SIM card management protocol and

the SynclML DM protocol that the common attribute between the two said protocols is

the ability to perform file operations wherein the file is identified by a URL.

The Examiner notes that where DM requires a URL to identify the source/target

dataset, it would have been obvious to assign a URL to a SIM card file as disclosed by

Kuo, and implement a relationship between the DM target URL and the SIM file URL in

order to eliminate the need for manual intervention by the user and allow for direct

dialogue between the smart card and the applications on the remote servers as desired

by Mariana Column 5 Lines 66.

Priority

This application claims benefits of priority from Foreign Application 0402091-3

filed August 25, 2004. (SWEDEN)

The effective date of the claims described in this application is August 25, 2004.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6, 9-10, 12-14, 16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Mariana (US Patent 7047558) further in view of Chakravorty (US

Patent 7139372) further in view of Arbo (US Publication 2004/0093342).

Mariana disclosed (re. Claim 1) a method for device management by managing

objects in devices in a device management system in a mobile network infrastructure,

the system having a first server with a first device management application using a first

protocol, (Mariana-Figure 3, *'enclosure HTTP server'*) a second server with a second

device management application using a second protocol, (Mariana-Figure 3, *'card HTTP

server'*) an interface between them and a device (Mariana-*'smart card'*) with objects to

be managed, the method comprising:

a) the first management application initiating a device management session with

the interface in order to manage the objects in said device, (Mariana-Figure 4, module

642, Column 13 Lines 35-55)

b) the interface translating the objects to be managed (Mariana-Column 6 Lines

40-45) into a form understood by the second management application (Mariana-Figure

4, module 842) and invoking management operations to be made by the second

management application, and

c) the first management application performing the management operations to

said device. (Mariana-Column 6 Lines 65)

While Mariana substantially disclosed the claimed invention Mariana did not

disclose (re. Claim 1) a device management system in a mobile network infrastructure.

Chakravorty disclosed (re. Claim 1) a device management system in a mobile

network infrastructure. (Chakravorty- Column 8 Lines 45-55, *SIM toolkit provides an*

interface for reading, downloading, deleting descriptors that are stored on the SIM

virtual vault storage)

Chakravorty disclosed managed data objects stored on the SIM card in the form

of descriptors which indicate the URL from the which the content can be downloaded.

Mariana and Chakravorty are analogous art because they present concepts and

practices regarding operations performed on smart card data objects. At the time of the

invention it would have been obvious to combine Chakravorty into Mariana. The

motivation for said combination would have been to enable management of digital data

and applications over SIM-enabled mobile devices. (Chakravorty-Column 5 Lines 20-25)

While Mariana-Chakravorty substantially disclosed the claimed invention Mariana-Chakravorty did not disclose (re. Claim 1) said *interface being distinct and separate from the device with second protocol objects to be managed, the second protocol* -- and -- '*the first management application requesting the interface to read or update the corresponding first protocol objects* ' -- and -- ' *the interface mapping the corresponding first protocol objects onto the second protocol objects to be managed in an interface database to translate the corresponding first protocol objects into the second protocol understood by the second management application.*

Arbo disclosed a universal data mapper for enabling SnycML commands to be interpreted according to the special translation requirements of each individual mobile device. The universal data mapper accepts the messages exchanges between the client devices and the web servers and is separate and distinct from said client and web servers. While Arbo disclosed embodiments wherein the second protocol is related to PIM data Arbo Paragraph 79 explicitly disclosed wherein the said universal data mapper is applicable to any type of data/protocol.

Arbo Paragraph 55 disclosed wherein the SyncML server is operable to call the universal mapping program methods MapToUC ( ) and MapTovCard ( ) upon receipt of a vCard or a request for an update of the dPIM data of a client device 104 received from the web server 120 and the sync engine 122, and to thereby initiate mapping of PIM data between the server iPIM storage object 114 and a vCard. The SyncML server 124

is also operable to handle protocol conversion and/or related tasks associated with the

communication of vCards via the SyncML protocol.

Arbo disclosed (re. Claim 1) said *interface being distinct and separate from the*

device with second protocol objects to be managed' (Arbo-Figure 1, universal data

mapper item 126,Paragraph 55) -- and -- '*the first management application*

requesting the interface to read or update the corresponding first protocol objects '

(Arbo-Paragraph 11 , Once mapping is completed, the universal mapping program

transforms the mapped data into a form suitable for storage in the server computer

system's database or for communication, as a vCard, to the client device') -- and -- '

the interface mapping the corresponding first protocol objects onto the second protocol

objects to be managed in an interface database to translate the corresponding first

protocol objects into the second protocol understood by the second management

application. (Arbo-Paragraph 11 , 'Once mapping is completed, the universal mapping

program transforms the mapped data into a form suitable for storage in the server

computer system's database or for communication, as a vCard, to the client device')

Mariana,Chakravorty and Arbo are analogous art because they present concepts

and practices regarding operations performed on smart card data objects. At the time

of the invention it would have been obvious to combine Arbo into Mariana-Chakravorty.

The motivation for said combination would have been to enable to support new types of

client devices through the mere addition of new configuration files respectively designed

for the new types of client devices. As a consequence, it is not necessary to perform the

costly, time consuming and resource intensive design, programming, testing, and

implementation of custom software device drivers in order for the universal mapping

system to support the mapping of personal information management data between a

new type of client device and a synchronization server system.(Arbo-Paragraph 12)

Claim 12 (re. a system) is rejected on the same basis as Claim 1.

The motivation to combine described in the rejection for Claim 1 applies to Claim

12.

Furthermore Mariana-Chakravorty-Arbo disclosed (re. Claim 12) a database

storing mapping relationships between first protocol objects to be managed and second

protocol objects to be managed. (Chakravorty-Column 8 Lines 15-20)

Mariana-Chakravorty-Arbo disclosed (re. Claim 2) steps of: d) the first

management application responds to the interface, e) the interface translates the

objects to be managed into a form understood by the first management application,

(Mariana-Column 6 Lines 40-45) and f) the first management application continues said

device management session with the interface.

Mariana-Chakravorty-Arbo disclosed (re. Claim 3,13) wherein mobile network infrastructure comprises the GSM network and a public network, such as internet. (Mariana-Column 10 Lines 45-55)

Mariana-Chakravorty-Arbo disclosed (re. Claim 4,14) wherein the device with the objects to be managed is selected from a SIM card in a mobile station, (Chakravorty-Column 7 Lines 65 thru Column 8 Lines 45) a USIM card in a mobile station, a handset in a mobile station, and a smart card in a computer connected to a handset in a mobile station.

Mariana-Chakravorty-Arbo disclosed (re. Claim 6,16) wherein the device with the objects to be managed is the SIM card in a mobile station and the second device management application uses a SIM File Management (SFM) protocol. (Chakravorty-Column 8 Lines 45-55, *SIM toolkit provides an interface for reading, downloading, deleting descriptors that are stored on the SIM virtual vault storage*)

The Examiner notes that SIM File Management protocol is described in the SIM Application Toolkit.

Mariana-Chakravorty-Arbo disclosed (re. Claim 9) wherein the interface checks

the identity of the device by means of a subscription identity (Mariana-Column 13 Lines

10-55) such as IMSI or MSISDN, and handset identity, such as the IMEI from a

repository in the infrastructure.   (Chakravorty-Column 7 Lines 65 thru Column 8 Lines

15, 'GSM SMS')

Mariana-Chakravorty-Arbo disclosed (re. Claim 10) wherein the RFM protocol

command includes also the selection of the transport channel. (Chakravorty-Column 7

Lines 65 thru Column 8 Lines 15, 'GSM SMS')

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 5,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Mariana (US Patent 7047558) further in view of Chakravorty (US Patent 7139372)

further in view of Arbo (US Publication 2004/0093342) further in view of SyncML DM

Protocol Version 1.1, published February 15, 2002 hereinafter referred to as DM.

While Mariana-Chakravorty-Arbo substantially disclosed the claimed invention

Mariana-Chakravorty-Arbo did not disclose (re. Claim 5,15) wherein the first device

management application uses the SyncML DM protocol.

DM disclosed (re. Claim 5,15) wherein the first device management application

uses the SyncML DM protocol. (DM-Page 8, Page 12)

Mariana,Chakravorty,Arbo and DM are analogous art because they present

concepts and practices regarding operations performed on smart card data objects. At

the time of the invention it would have been obvious to combine DM into Mariana-

Chakravorty-Arbo. The motivation for said combination would have been to enable

transfer management actions between client and management servers. (DM-Page 7,

Overview)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-8,11,17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mariana (US Patent 7047558) further in view of Chakravorty (US Patent 7139372) further in view of Arbo (US Publication 2004/0093342) further in view of SyncML DM Protocol Version 1.1, published February 15, 2002 hereinafter referred to as DM, further in view of Kuo (US Patent 7322513).

Mariana-Chakravorty-Arbo-DM disclosed (re. Claim 7,17) wherein the data objects to be managed are OMA-DM managed objects (DM-Page 12, Section 8.3, SyncBody parameters) and data entities residing on SIM understood by a SIM File Management (SFM) protocol . (Chakravorty-Column 7 Lines 65 thru Column 8 Lines 45)

The Examiner notes that as per Applicant Specifications Page 12 the mapping consists of assigning a URL to the SIM object file.

While Mariana-Chakravorty-Arbo-DM substantially disclosed the claimed invention Mariana-Chakravorty-DM did not disclose (re. Claim 7) wherein the data objects to be managed are OMA-DM managed objects (DM-Page 12, Section 8.3,

SyncBody parameters) that are mapped onto data entities residing on SIM understood

by a SIM File Management (SFM) protocol .

Furthermore Kuo disclosed (re. Claim 7) wherein the data objects to be managed

are OMA-DM managed objects (Kuo-Column 3 Lines 10-45, URL and HTML files) that

are mapped onto data entities residing on SIM understood by a SIM File Management

(SFM) protocol .

The Examiner notes that where DM requires a URL to identify the source/target

dataset, it would have been obvious to assign a URL to a SIM card file as disclosed by

Kuo, and implement a relationship between the DM target URL and the SIM file URL.

Mariana,Chakravorty,Arbo,DM and Kuo are analogous art because they present

concepts and practices regarding operations performed on smart card data objects. At

the time of the invention it would have been obvious to combine Kuo into Mariana-

Chakravorty-DM. The motivation for said combination would have been to enable

automatically and selectively translates each file, URL, or file reference as they should

be when the contents of the smart card are read. (Kuo-Column 2 Lines 10-15)

Mariana Column 4 Lines 40-55 clearly indicates a need for communication

interfaces between smart card applications and remote servers on the Internet in order

to perform device management operations such as (Mariana-Column 6 Lines 60-65)

downloading, updating and/or deleting applications or parts of applications stored in the

smart card (files, programs, scripts, etc.) via the internet network. SyncML DM protocol

facilitates device management operations by indicating the URL of the target data set

but does not take into account smart card files.

Chakravorty disclosed implementing the SIM toolkit for reading descriptor files

which are on the smart card. Thus Chakravorty implicitly disclosed a file management

system on the smartcard.

Kuo disclosed assigning and storing a URL on the smart card wherein said URL

represents a smartcard file.

The Examiner notes that it would have been obvious to a person such as

Mariana who desires to bridge the gap between the SIM card management protocol and

the SynclML DM protocol that the common attribute between the two said protocols is

the ability to perform file operations wherein the file is identified by a URL.

The Examiner notes that where DM requires a URL to identify the source/target

dataset, it would have been obvious to assign a URL to a SIM card file as disclosed by

Kuo, and implement a relationship between the DM target URL and the SIM file URL in

order to eliminate the need for manual intervention by the user and allow for direct

dialogue between the smart card and the applications on the remote servers as desired

by Mariana Column 5 Lines 66.

Mariana-Chakravorty-Arbo-DM-Kuo disclosed (re. Claim 8) wherein for each

OMA-DM protocol command, the translation is performed by selecting the appropriate

RFM protocol command equivalent based on the mobile device type, more specifically,

the SIM card type. (Kuo-Column 4 Lines 10-15)

Mariana-Chakravorty-Arbo-DM-Kuo disclosed (re. Claim 11) wherein the

interface translating the objects to be managed is an application making use of a

conversion map holding the relationships between objects to be managed of different

protocols.

The Examiner notes that as per Applicant Specifications Page 12 the mapping

consists of assigning a URL to the SIM object file.

The Examiner notes that where DM requires a URL to identify the source/target

dataset, it would have been obvious to assign a URL to a SIM card file as disclosed by

Kuo, and implement a relationship between the DM target URL and the SIM file URL.

Furthermore it would have been obvious to implement a table consisting of the

URL/object relationships to facilitate the lookup and matching of the URL/object.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to the enclosed PTO-892 form.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to GREG BENGZON whose telephone number is

(571)272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30

PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Vaughn can be reached on (571)272-3922. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. B./

Examiner, Art Unit 2444

 /William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444